

CHRONIC WASTING DISEASE (CWD)

NEW YORK STATE DEPARTMENT OF HEALTH

What is Chronic Wasting Disease (CWD)?

CWD is a disease found in some deer and elk populations, that damages portions of the brain and typically causes progressive loss of body condition, behavioral changes, excessive salivation and death. The cause of the disease is suspected to be a type of prion (protein infectious particle) that is found in some tissues of infected animals.

Where does CWD occur?

CWD is a disease that is unique to North America. As of July, 2005, CWD has been found in **wild deer and/or elk** in Colorado, Illinois, Nebraska, New Mexico, New York, South Dakota, Utah, Wisconsin, Wyoming, and in the Canadian province of Saskatchewan. In **captive deer and/or elk**, it has been found in Colorado, Kansas, Minnesota, Montana, Nebraska, New York, Oklahoma, South Dakota, Wisconsin, Wyoming, and in the Canadian provinces of Alberta and Saskatchewan.

How is CWD transmitted?

Experimental evidence indicates that infected deer and elk probably transmit the disease through animal-animal contact, and/or contamination of feed or water sources with saliva or bodily waste material. The transmission may be enhanced when deer and elk are congregated, such as around man-made feed and water stations.

How soon after CWD exposure do signs of infection appear?

CWD has a long incubation period and typically takes at least 16 months for an infected animal to show signs of illness. Infected animals do not show signs of illness until they have been infected for a number of months.

Are domestic animals at risk for CWD?

There is no indication to date that CWD is a threat to domestic animals or livestock other than deer or elk, and there have been no reports of CWD in dogs or cats.

Are prion diseases transmissible to humans?

Although there is considerable ongoing research on this issue, there is no confirmed human neurologic disease linked to CWD at this time. In addition, there have never been any indications of human illness related to scrapie in sheep. However, ingestion of cattle infected with bovine spongiform encephalopathy (BSE) overseas appears to be related to human deaths from a new variant of a previously identified neurologic disease, Creutzfeldt-Jakob disease (vCJD).

Are there health risks for hunters in handling deer or elk?

There is no evidence to date that hunters have a risk of acquiring CWD. Depending on how an animal is handled, there may be a risk of other diseases including rabies. Hunters should observe normal precautions around any animals, such as avoiding sick or strange-acting animals. They must report to their local health department any potential rabies exposures such as an animal bite or scratch, or contact between a person's eyes, nose, or mouth (mucous membranes) or fresh open wound with the animal's saliva, brain, or other nervous tissue.

What should be done if someone sees a sick deer/elk?

Because a sick deer or elk could have rabies, if there has been human contact of concern (see above) the animal must be reported to the local health department. After the animal has been humanely euthanized, the local health department will send the head to the New York State Health Department's Rabies Laboratory for rabies testing. Animals that are negative for rabies will be submitted for subsequent CWD testing. If there has been no human contact, the sick animal should be reported to the nearest New York State Department of Environmental Conservation office.-

Are there any precautions for handling, processing, or eating meat from deer or elk?

To minimize the risk of transmission of any infectious diseases when handling or processing animals, the following precautions are recommended:

- Deer or elk that are observed to be ill, or found dead, should not be handled and should not be eaten.
- Wear rubber or latex gloves when handling or processing carcasses.
- Avoid handling or cutting through the skull or spinal cord. Use separate dedicated knives, saws and cutting boards to butcher deer, particularly if you cut through the spinal cord or skull (such as when removing antlers). Do not use regular kitchen utensils. Wash thoroughly with soap and water any knives, butchering tools, work surfaces, hands and any other part of the body that has been exposed to animal tissues, blood, urine, or feces. Equipment should then be rinsed with boiling (212 degree Fahrenheit) water or sanitized with a chemical sanitizer.
- As an additional precaution against CWD, soak cleaned knives and tools for one hour in a fresh solution of household chlorine bleach (unscented) mixed with an equal amount of water (e.g., 1 quart bleach with 1 quart of water – a 50% solution), air dry, then rinse with clean water. Wipe down cleaned counters and other surfaces with 50% bleach solution and allow them to air dry. If bleach contacts eyes, skin, or clothing, immediately wash affected area with water and remove affected clothing. Make sure that enough fresh air is available because bleach may cause eye, nose, or throat irritation.
- Should you decide to take the skull cap (e.g., with antlers), make sure to thoroughly clean the skull cap, utensils and work surfaces with bleach solution, as described above.
- Avoid handling brain or spinal tissues/fluids, saliva and mouth parts and wash hands thoroughly with soap and water afterward if such handling occurred. If these tissues or fluids get into a fresh open break in a person's skin or the eyes, mouth, or nose, contact the local health department to evaluate possible rabies exposure and need for testing the animal for rabies.
- Request if possible that individual animals are processed individually, without meat from other animals being added together.
- The brain, spinal cord and other nervous tissue, spleen, pancreas, eyes, tonsils, and lymph nodes of game may have CWD prions, and additional organs (liver, kidney, heart and salivary glands) may pose a risk of infection for a number of diseases. Normal field dressing will eliminate most of these organs and tissues. Hunters should have deer boned out and have as much fat, connective tissue and lymph nodes removed as possible.

- Although no current evidence links CWD to human health, out of an abundance of caution, we recommend that people not consume, distribute, or donate for human consumption a known or suspect CWD positive animal.
- For more information about handling, processing, or eating meat from deer or elk in other states, contact those state agriculture, wildlife, and health agencies.

Are there any risks from deer waste or products?

Although there is no indication of human infection due to contact with deer waste or products related to CWD-infected deer or elk, the following disease control precautions are recommended as general prevention for multiple diseases:

- Avoid contact with animal bodily waste material, and clean up animal waste from areas frequented by children.
- If there is skin contact with animal waste, wash the area with soap and water immediately.

How is CWD diagnosed?

While apparently healthy animals might be infected, eventually infected animals will develop signs of illness. Definitive diagnosis for the disease currently requires laboratory testing of the brain and/or lymph nodes.

Can a specific deer or elk be tested?

There is ongoing CWD surveillance in New York State, but a fee-for-service program of testing individual animals is not currently available. Because the CWD status for most animals will be unknown, precautions provided above for handling and consumption should be followed.

Where is there additional and updated information about CWD?

More information about CWD is available from the following agencies:

The New York State Department of Environmental Conservation:

<http://www.dec.state.ny.us/website/dfwmr/wildlife/deer/cwd.html>

The New York State Department of Agriculture and Markets:

<http://www.agmkt.state.ny.us/AI/cwd.html>

The New York State Department of Health:

<http://www.nyhealth.gov/nysdoh/zoonoses/cwd.htm>

Cornell University:

<http://wildlifecontrol.info/CWD/default.htm>

Additional information, including the status of CWD in other states, is also available from the USDA: <http://www.aphis.usda.gov/vs/nahps/cwd/>

USGS National Wildlife Health Center:

http://www.nwhc.usgs.gov/research/chronic_wasting/chronic_wasting.html

Chronic Wasting Disease Alliance: <http://www.cwd-info.org>

Other state agencies may have valuable information, particularly for deer or elk from those states. Wisconsin has a particularly useful Website with detailed information and photos for processing deer, and a videotape and transcript addressing questions about human health risks: <http://dnr.wi.gov/org/land/wildlife/whealth/issues/CWD/>

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